Accounting and Auditing with Application

www.aaa.reapress.com

Acc. Aud. Appl. Vol. 1, No. 4 (2024) 196–204.

Paper Type: Original Article

# Managerial Ability, Product Market Competition, and Corporate Behavior (Case Study: Iranian Capital Market)

**Seyed Mohammad Moshashaei***

Department of Accounting, University of Guilan, Rasht, Iran; moshashaei@guilan.ac.ir.

**Citation:**

| | |
|---|---|
| *Received: 05 March 2024*<br>*Revised: 06 May 2024*<br>*Accepted: 10 June 2024* | Moshashaei, S. M. (2024). Managerial ability, product market competition, and corporate behavior (case study: Iranian capital market). *Accounting and auditing with application*, *1*(4), 196-204. |

## Abstract

This study investigates management ability, product market competition, and corporate behavior. Research evidence are consists of all the companies listed on the Tehran Stock Exchange during 2013 to 2021. To collect the research data, Rahvard Novin and Tadabipardaz database were used. This research is a descriptive-analytical research. The multiple regressions based on static panel were tested in Eveiws software to examine the research hypotheses. The findings indicate managerial ability has a significant effect on market share growth, and product market competition has a significant impact on market share growth. Also, managerial ability has a moderating effect on the relationship between product market competition and market share growth.

**Keywords:** Managerial ability, Market share, Product market competition.

## 1 | Introduction

An essential factor that can lead any individual to success is personal abilities and capabilities. In a business entity, managers can claim to be efficient only when they optimally and effectively utilize the company's resources to achieve its objectives. Efficient managers are capable of better utilizing existing resources in the process of realizing organizational goals. In other words, an efficient manager can maximize the organization's benefits using minimal resources [1].

The ability of management to deploy the company's resources to generate profit is of utmost importance. If management lacks the necessary efficiency, current shareholders may seek to change the company's management or implement incentive programs and offer benefits and rewards to enhance management's

Corresponding Author: moshashaei@guilan.ac.ir

10.22105/aaa.v1i4.50

efficiency. Potential shareholders also strive to assess management efficiency before investing by evaluating the company's stock. In both cases, efficiency criteria provide a basis for decision-making [2].

Given that the development of capital markets has increased shareholder awareness and, consequently, put more pressure on companies to perform better, managers are now facing an era that requires them to strengthen their capabilities and establish a new economic framework within their organizations that better reflects value and profitability. Shareholders, as the business entity's owners, seek to increase their wealth. Since wealth growth results from the favorable performance of the business entity, evaluating the company's value is highly significant for its owners [3]. In modern management literature, management has evolved from working through others to working with others. This has increased the complexity of management, a trend that will likely continue in the future. Consequently, new paradigms have emerged in this field. Among these paradigms is the goal of value creation, which has become a top priority in management objectives. A value-creating manager must utilize and implement effective management mechanisms and practices that contribute to value creation. Success in value creation largely depends on the quality of performance measurement [4].

On the other hand, companies make various operational decisions. For example, they conduct initial market research, offer attractive products, decide on production quantities and sales prices, advertise, secure financing, commence production, and eventually sell their products to consumers. The nature of competition in product markets significantly impacts companies' behavior across all competitive policies. The competitive advantage of successful firms is not solely a result of their performance but also depends on how the market evaluates the goods and services of competitors. If market rules change, the distribution of competitive advantage among firms will also shift. In any market, firms strive to gain a greater share. Over a certain period, some firms fail and exit the market, some remain, and new firms enter. Among the new entrants and the surviving firms, some will be capable of innovation and market dominance.

## 2|Theoretical and Hypotheses

Commercial competition is one of the primary concerns for company managers, as firms regularly compete to gain market share. Although profit-maximization theories suggest that competitive advantages can improve efficiency, managers generally view competition unfavorably due to its negative impact on company revenues. Some researchers suggest that the pressure of competition is felt more acutely among Small and Medium-sized Enterprises (SMEs). However, large companies are not immune to the effects of competition. Demonstrated that the significant negative impact of competitor growth on company growth is observable even among giant firms competing in the product market [5]. The literature on product market competition is extensive, and it can be stated that a company's financial and investment decisions are influenced by competition in product markets.

Yung and Nguyen [6] argues that most empirical economic models consider company managers as black boxes making entirely rational decisions. However, empirical models account for heterogeneity in preferences, thereby highlighting the importance of managerial abilities in decision-making and, ultimately, in company performance. Recent research on strategic behavior has shown that managerial ability is critical to a company's strategic decisions. For instance, managerial ability has been shown to significantly affect the quality of corporate earnings. Andreu, argue managerial ability is a valuable corporate asset, especially beneficial for high-ability firms. Competent managers outperform their less capable counterparts across various corporate domains. Consistent with this perspective, along with Castanheiro, suggest that managerial ability is a critical asset because firms with competent managers often secure profitable opportunities in competitive markets [6].

Investors' primary goal in purchasing a company is to increase wealth, which is achieved through stock returns. Managers, aiming to maximize corporate value and effectively manage resources, strive to decide on the company's performance by selecting an appropriate mix of assets and liabilities. The lack of efficient long-term planning has been identified as one of the most common causes of financial problems and failures for

companies. A company's policies regarding investment and financing are interrelated; thus, neither can be examined independently of the other [7]. Addressing specific elements of corporate financial policies—such as investment in new assets, the level of financial leverage, the appropriate cash margin for shareholder payouts, and the liquidity and working capital needed for ongoing operations—helps managers develop a clear financial plan, thereby enabling success and survival in today's markets [8].

In recent years, following the bankruptcies of major global corporations like Enron and WorldCom, researchers and financial analysts have studied these cases and found that the main reasons for these failures were managerial inability to manipulate earnings, report manipulated and low-quality earnings, and address financial distress. This led to corporate bankruptcies and fostered skepticism about the accounting and auditing professions. Consequently, there is a growing shift in focus from merely emphasizing profit figures to emphasizing profit quality and company performance. One tactic financial managers might use to conceal weak performance (to buy time and delay bankruptcy) is artificially inflating profit margins due to weak capital structures. Such actions reduce the reliability of reported profits. In accounting literature, managerial ability is considered an aspect of high-quality company performance.

Furthermore, findings from international studies indicate that the performance of bankrupt companies is lower than that of healthy companies due to earnings management practices. Therefore, company performance, earnings resistance, and managerial ability are critical evaluation criteria. In other words, company performance is a vital source of internal capital under the CEO's control. Decisions regarding the allocation of cash resources are made at managers' discretion. Generally, a company's survival depends on how well it manages its performance [9]. Personal ability and capabilities are important factors that can lead any individual to success. Managers can only claim to be capable in a business unit when they have optimally and efficiently utilized the company's resources to achieve its goals. Effective managers can make the best use of available resources to achieve organizational objectives. In other words, an effective manager can gain the maximum benefit for the organization with minimal resources. The managerial ability to deploy company resources to generate profit is paramount. If management lacks the required efficiency, current shareholders will seek to implement changes in the business unit's management or enhance efficiency through incentive programs and rewards. Potential shareholders will also assess management efficiency before investing by evaluating the company's stock. In both cases, the efficiency criterion provides a basis for decision-making [10].

With the development of capital markets and increased shareholder awareness, the pressure on companies to perform better has increased. Managers face an era that forces them to strengthen their capabilities and establish a new company economic framework that better reflects value and profitability. Shareholders, as the business unit owners, seek to increase their wealth. Since wealth increases result from the company's optimal performance, business unit valuation is important to the owners. In the new management literature, working with others has replaced the old notion of working by others. This shift adds complexity to management and will continue to do so. Therefore, new paradigms in this area have emerged, one of which is the goal of value creation, which has become a central management objective. A value-creating manager should use effective mechanisms and methods to promote value creation and apply them in practice. Success in value creation largely depends on the quality of performance measurement [11].

On the other hand, companies make various operational decisions. For example, they conduct preliminary market research, offer attractive products, decide on production quantities and sales prices, advertise, arrange financing, begin production, and sell products to consumers. The nature of competition in product markets affects almost all firms' competitive policies. Competitive advantage in successful firms is not solely due to their performance; it also depends on how the market evaluates the goods and services of competitors. If market rules change, the distribution of competitive advantage between firms will also change. In any market, firms compete for a larger share. Over time, some firms fail and exit the market, others remain, and new firms enter. Some will innovate, dominate the market, and establish a competitive advantage among the new

entrants and the remaining firms. One key factor that could be crucial for a firm's survival in a competitive environment is managerial capability. Based on the above considerations, the following research hypotheses are proposed:

H1: managerial ability significantly affects market share growth.

H2: product market competition significantly affects market share growth.

H3: the moderating effect of managerial ability on the relationship between market competition and market share growth is significant.

# 3 | Literature Review

Was the first to quantitatively measure managerial ability by designing a model that uses accounting variables to quantify managerial capability. They employed Data Envelopment Analysis (DEA) to measure company efficiency and then used multiple linear regression to separate managerial ability from intrinsic efficiency [12]. Studied the relationship between market competition and financing methods of listed companies in China. They concluded that the relationship between competition and financing methods is nonlinear and depends on industry type, company size, and growth prospects [13]. Explored the relationship between managerial ability and earnings quality in the U.S. from 2001 to 2019. They created a managerial ability proxy using boundary analysis techniques and separated the effects of managers from those of the company. Their findings showed that earnings quality, measured by accruals based on cash flows, increases with managerial ability [14].

Investigated the relationship between managerial ability and company competition. Their study found no significant relationship between managerial ability and product market competition [6]. Studied the relationship between corporate governance, market competition, and cash management. They found a significant positive relationship between institutional ownership and non-executive board members with cash holding after an IPO. Additionally, they found a positive and significant relationship between market competition and cash holding after an IPO but no significant relationship between the duality of the CEO's role and cash holding after an IPO.

# 4 | Research Methodology

This research is applied in nature and follows a retrospective approach. The data collected is sourced from the Tehran Stock Exchange. The methodology is descriptive and falls under the category of causal-correlational research. To analyze the hypotheses, data will be gathered from the financial information of companies provided by the Tehran Stock Exchange, including PDF formats of annual financial statements and accompanying notes. The data will also be collected from used Rahvard Novin and Tadabipardaz database. The research will use a combination of cross-sectional and time-series data (panel data) and multiple regression analysis.

## 4.1 | Statistical Population and Sample

The statistical population for this study consists of all companies listed on the Tehran Stock Exchange from 2013 to 2021. A systematic exclusion method is employed to determine the sample size based on the following criteria:

I. The financial year must end in Esfand.

II. The company must have been listed on the Tehran Stock Exchange before 2013 and remained listed through 2021.

III. The company should not be a financial institution (such as banks, financial institutions, investment companies, or financial intermediaries).

IV. The company’s financial information must be accessible.

Ultimately, 116 companies were selected as the sample for this study.

## 4.2 | Regression Model

Based on the theoretical discussions and empirical studies on managerial ability, product market competition, and company behavior, and considering the, the following regression model is estimated:

$$\text{Market growth}_{it} = \beta_0 + \beta_1 \text{Managerial ability}_{it} + \beta_2 \text{Existing competition}_{it} + \beta_3 \text{Managerial ability}_{it} * \text{Existing competition}_{it} + \beta_4 X_{it} + \varepsilon_{it}$$

**Dependent variable**

**Market growth (growth in market share):** the company's behavior in terms of market share growth is used as the dependent variable. Market share growth is measured based on the company's industry-specific market share, with a mean of zero and a standard deviation of one.

**Independent variables**

**Managerial ability (MANAB):** managerial ability and its various criteria are considered part of the organizational capital and are categorized as intangible assets. According to, managerial ability refers to the efficiency of managers in converting company resources into income compared to competitors. These company resources include inventory costs, sales and administrative expenses, tangible fixed assets, operating leases, R&D costs, and intangible assets. More capable managers have a better understanding of technology and industry trends and can more accurately forecast product demand. Furthermore, they are more likely to invest appropriately in higher-value projects and effectively manage employees. In the short term, these managers are expected to generate higher revenue using a certain level of resources or achieve a certain level of revenue with fewer resources.

$$\max_{v^\theta} = \frac{\text{Sales}}{v_1 \text{PP\&E} + v_2 \text{NetOpL} + v_3 \text{R\&D} + v_4 \text{Goodwill} + v_5 \text{OthInt} + v_6 \text{Inv} + v_7 \text{SG\&A}}.$$

Managerial ability establishes an efficiency frontier for companies, a value between zero and one. Companies whose efficiency measure (MAX θ) is greater than the average are positioned above the efficiency frontier and are considered efficient, receiving one value. Companies whose efficiency measure (MAX θ) is less than the average are positioned below the efficiency frontier and are assigned a value of zero.

**Existing competition (EXCOM):** the Herfindahl-Hirschman Index (H-H) is used for the competition variable. This index is the sum of the squared market shares of all firms within an industry, indicating market concentration.

$$\text{H} - \text{H} = \sum_{i=1}^{n} S_i^2,\ \text{H} - \text{H} = \sum_{i=1}^{n} \left(\frac{x_i}{X}\right)^2.$$

Where S is the market share of firm I and X is the market size.

**Control variables:** the control variables in the study are as follows:

I. Firm Cash (Cash): cash liquidity and short-term investments divided to total assets.

II. Firm Leverage (LEV): the total debt ratio to total assets.

III. Return on Assets (ROA): the net income ratio to total assets.

IV. Firm Size (Size): the natural logarithm of the company's total assets.

V. Market-to-Book Ratio (MTB): the ratio of the market value of equity to its book value.

VI. Firm Capital Expenditures (Capital): capital expenditures as a ratio of total assets.

VII. Firm PPE: the ratio of property, plant, and equipment (PPE) to total assets.

VIII. State Per Capita (SPC): the ratio of GDP to the country's total population, indicating citizens' average income level.

# 5 | Results

The diagnostic tests' results indicate that the company's behavior model was estimated using panel data and the fixed-effects method. The result of the model estimation is shown in *Table 1*.

**Table 1. Result of model estimation using the static panel method.**

| **Dependent Variable: Market Share Growth** | | | | |
|---|---|---|---|---|
| **Variables** | **β** | **S.D** | **t-Stat.** | **Prob.** |
| C | 0.012593 | 0.028348 | 0.444236 | 0.6570 |
| Manab | 0.136248 | 0.050825 | 2.680720 | 0.0075 |
| Excom | 0.779170 | 0.376050 | 2.071981 | 0.0385 |
| Manab*Excom | 0.023533 | 0.009721 | 2.420961 | 0.0157 |
| Cash | 0.355940 | 0.098030 | 3.631110 | 0.0003 |
| Lev | -0.447600 | 0.194900 | -2.296522 | 0.0219 |
| Roa | 0.390028 | 0.197363 | 1.976193 | 0.0484 |
| Size | 0.927920 | 0.448730 | 2.067890 | 0.0390 |
| Mtb | 0.399300 | 0.237700 | 1.679593 | 0.0934 |
| Capital | 0.104952 | 0.033526 | 3.130444 | 0.0018 |
| PPE | 0.115728 | 0.058208 | 1.988177 | 0.0471 |
| SPC | 0.226369 | 0.122153 | 1.853152 | 0.0642 |
| R-squared | | | 0.729954 | |
| Adjusted R-squared | | | 0.689817 | |
| Durbin-Watson stat. | | | 1.913676 | |
| F-statistic | | | 18.18629 | |
| Prob (F-statistic) | | | 0.000000 | |

The results obtained from estimating the static panel model, with company behavior as the dependent variable, show that the coefficients of the variables are significant in the long term, and their signs are as expected and consistent with the topic's theoretical foundations.

**Hypothesis 1:** the first hypothesis of the study, which suggests that managerial ability has a significant impact on market share growth in companies listed on the Tehran Stock Exchange, is restated as follows:

I. H0= managerial ability does not significantly affect market share growth in companies listed on the Tehran Stock Exchange.

II. H1= managerial ability significantly affect market share growth in companies listed on the Tehran Stock Exchange.

The p-value for the MANAB (managerial ability) variable is 0.0075, and since this probability is less than 0.05, the null hypothesis is rejected. As a result, managerial ability has a significant effect on market share growth in companies listed on the Tehran Stock Exchange, which shows that the first hypothesis of the study cannot be rejected at the 95% confidence level.

**Hypothesis 2:** the second hypothesis of the study, which suggests that product market competition has a significant impact on market share growth in companies listed on the Tehran Stock Exchange, is restated as follows:

I. H0= product market competition does not significantly affect market share growth in companies listed on the Tehran Stock Exchange.

II. H1= product market competition significantly affect market share growth in companies listed on the Tehran Stock Exchange.

The p-value for the EXOM (product market competition) variable is 0.0385, and since this probability is less than 0.05, the null hypothesis can be rejected. Product market competition has a significant effect on market share growth in companies listed on the Tehran Stock Exchange, which shows that the study's second hypothesis cannot be rejected at the 95% confidence level.

**Hypothesis 3:** the third hypothesis of the study, which suggests that managerial ability moderates the relationship between product market competition and market share growth in companies listed on the Tehran Stock Exchange, is restated as follows:

I. H0= the moderating effect of managerial ability on the relationship between product market competition and market share growth in companies listed on the Tehran Stock Exchange is insignificant.

II. H1= the moderating effect of managerial ability on the relationship between product market competition and market share growth in companies listed on the Tehran Stock Exchange is significant.

The p-value for the EXCOM*MANAB variable is 0.0157, and since this probability is less than 0.05, the null hypothesis is rejected. As a result, the moderating effect of managerial ability on the relationship between product market competition and market share growth in companies listed on the Tehran Stock Exchange is significant, and this shows that the third hypothesis of the study cannot be rejected at the 95% confidence level.

# 6 | Conclusion

Today, where organizations and societies face dramatic environmental and technological changes, as well as global trade and globalization, the ability to achieve the desired level of performance has become shrouded in ambiguity. In this context, what can ensure the flourishing and growth of organizations is the presence of an authoritative and efficient management system. In other words, when there is authority and capability, it is this key factor that can guarantee the good performance of organizations in the current conditions [15], [16]. A subtle and definitive point is that without a capable and efficient manager, one cannot influence subordinates. The lack of necessary capabilities to perform tasks causes employees to establish informal relationships to solve problems, leading individuals to deviate from their primary responsibilities, which can damage the entire system with inappropriate decisions. Since senior managers possess varying degrees of abilities, one of the most valuable intangible assets of companies is the capabilities of their managers. Attention to this factor improves organizational performance and increases competitiveness in the market. Additionally, managerial ability is defined as the management team's efficiency compared to its peers in transforming company resources into income.

Managers with higher capabilities better understand and analyze the current and future conditions of the company and industry, making more effective investment decisions. Managerial ability is valuable and irreplaceable because managers are responsible for identifying, developing, and deploying company resources to maximize shareholder value. Managerial ability is an important part of business success, as senior capable managers are very effective in creating strategic assets and increasing company value [17]. The value of a company, in terms of shareholders, investors, managers, creditors, and other stakeholders, is crucial in evaluating the future of the company and its impact on risk and return estimates, as well as the level of risk tolerance. This is one of the most important aspects to be considered in any company. Given that higher risk tolerance in managers to improve stock prices plays a crucial role in avoiding financial crises, the agency theory suggests a conflict of interest between managers and owners. Specifically, managers tend not to take many risks due to the negative aspects of risk and associated threats. On the other hand, owners or investors prefer managers to invest in projects with positive Net Present Value (NPV), as these projects tend to increase the risk of large companies and raise the potential for financial crises. Risk tolerance is one of the factors that ensure organizational sustainability. Moreover, higher managerial ability can lead to more efficient management of the company's daily operations, especially during critical operational periods where managerial

decisions can significantly impact company performance. Capable managers are more likely to invest in projects with higher positive NPV and have better abilities to execute those projects effectively.

## Conflict of Interest

The authors declare no conflict of interest.

## Data Availability

All data are included in the text.

## Funding

This research received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## References

[1] Teece, D. J. (2019). A capability theory of the firm: An economics and (Strategic) management perspective. *New zealand economic papers*, *53*(1), 1–43. DOI:10.1080/00779954.2017.1371208

[2] George, G., Haas, M. R., McGahan, A. M., Schillebeeckx, S. J. D., & Tracey, P. (2021). Purpose in the For-Profit Firm: A Review and Framework for Management Research. *Journal of management*, *49*(6), 1841–1869. DOI:10.1177/01492063211006450

[3] Arthur, A. A., Ohwoekevwo, J. U., & Asuquo, I. U. (2024). Influence of chief executive officers' managerial attributes on tax avoidance of selected production firms in Nigeria. *Management analytics and social insights*, *1*(2), 272–286. DOI:10.22105/xb1jhb09

[4] Andreou, P. C., Philip, D., & Robejsek, P. (2016). Bank liquidity creation and risk-taking: Does managerial ability matter? *Journal of business finance & accounting*, *43*(1–2), 226–259. https://onlinelibrary.wiley.com/doi/abs/10.1111/jbfa.12169

[5] Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: The role of performance and innovation. *Journal of open innovation: Technology, market, and complexity*, *8*(3), 163. https://www.sciencedirect.com/science/article/pii/S2199853122007648

[6] Yung, K., & Nguyen, T. (2020). Managerial ability, product market competition, and firm behavior. *International review of economics & finance*, *70*, 102–116. DOI:10.1016/j.iref.2020.06.027

[7] Fallah Shayan, N., Mohabbati-Kalejahi, N., Alavi, S., & Zahed, M. A. (2022). Sustainable development goals (SDGS) as a framework for corporate social responsibility (CSR). *Sustainability*, *14*(3). DOI:10.3390/su14031222

[8] Supsermpol, P., Huynh, V. N., Thajchayapong, S., & Chiadamrong, N. (2023). Predicting financial performance for listed companies in Thailand during the transition period: A class-based approach using logistic regression and random forest algorithm. *Journal of open innovation: technology, market, and complexity*, *9*(3), 100130. https://www.sciencedirect.com/science/article/pii/S2199853123002329

[9] Shemshad, A. (2023). The effect of financial leverage and product competition on the risk of financial helplessness: implications of capital structure in the presence of agency cost. *Financial and banking strategic studies*, *1*(1), 56-68. (**In Persian**). DOI:10.22105/fbs.2023.178952

[10] Teece, D. J. (2018). Business models and dynamic capabilities. *Long range planning*, *51*(1), 40–49. https://www.sciencedirect.com/science/article/pii/S0024630117302868

[11] Dyck, A., Lins, K. V, Roth, L., & Wagner, H. F. (2019). Do institutional investors drive corporate social responsibility? International evidence. *Journal of financial economics*, *131*(3), 693–714. https://www.sciencedirect.com/science/article/pii/S0304405X18302381

[12] Mergoni, A., Emrouznejad, A., & De Witte, K. (In Press). Fifty years of data envelopment analysis. *European journal of operational research*. https://www.sciencedirect.com/science/article/pii/S0377221724009913

[13] Guney, Y., Li, L., & Fairchild, R. (2011). The relationship between product market competition and capital structure in Chinese listed firms. *International review of financial analysis*, *20*(1), 41–51. https://www.sciencedirect.com/science/article/pii/S1057521910000712

[14] García Osma, B., Gomez-Conde, J., & Lopez-Valeiras, E. (2022). Management control systems and real earnings management: Effects on firm performance. *Management accounting research*, *55*, 100781. https://www.sciencedirect.com/science/article/pii/S104450052100055X

[15] Garrido-Moreno, A., Martín-Rojas, R., & García-Morales, V. J. (2024). The key role of innovation and organizational resilience in improving business performance: A mixed-methods approach. *International journal of information management*, *77*, 102777. https://www.sciencedirect.com/science/article/pii/S0268401224000252

[16] Vagfi, S. H., & Nilofari, Z. (2021). The effect of business strategy on company performance with emphasis on management ability. *Innovation management and operational strategies*, *2*(3), 285-305. (**In Persian**). DOI:10.22105/imos.2021.298290.1152

[17] Nguyen, P. N. D., Mai, K. N., & Le, T. H. (2023). Strategic perspectives, creativity, and financial performance in Vietnamese SMEs. *Heliyon*, *9*(9), 1–12. DOI:10.1016/j.heliyon.2023.e20354